

REMARKS

The Applicants respectfully request reconsideration in view of the following remarks and amendments. Claims 7-9 and 12 are amended. Accordingly, claims 1-16 are pending in the application.

I. Claims Rejected Under 35 U.S.C. § 112

Claims 7, 8, 10, and 11 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In response, claim 7 is amended to depend on claim 5 and the elements of “the fifth transmission permission messages” are replaced with “fifth transmission permission messages” to correct the antecedent basis issue for these elements. Claim 8 is amended to depend on claim 7 to correct the antecedent basis issue for the elements of “the first through fifth transmission permission messages.” Lastly, with respect to claim 10, claim 9 is amended to depend on claim 2 to correct the antecedent issue with the elements of “the first and second transmission permission messages” in claim 10 (because claim 10 depends on claim 9).

In light of the above amendments, the Applicants believe that claims 7, 8, 10, and 11 are compliant under 35 U.S.C. § 112, second paragraph. Accordingly, reconsideration and withdrawal of the rejection of claims 7, 8, 10, and 11 are respectfully requested.

II. Claims Rejected Under 35 U.S.C. § 103

Claims 1, 9, and 16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant’s Admitted Prior Art (hereinafter “AAPA”) in view of U.S. Patent Publication No. 2003/0227926 issued to Ramamurthy et al. (hereinafter “Ramamurthy”) and U.S. Patent No. 6,783,367 issued to Wang et al. (hereinafter “Wang”).

With respect to the § 103(a) rejection of claim 1, the Examiner has conceded (see page 4 of the Office Action) that AAPA and Ramamurthy fail to teach or suggest the elements of “determining priorities of the transmission permission messages based on . . . registration information of an optical network unit (ONU) that receives the transmission permission messages,” as recited in claim 1. In addition, Wang fails to teach these missing elements as well.

Instead, the portion of Wang relied upon by the Examiner discloses that a user's priority level can be determined based on registration information (e.g., name, company, title, etc.). See Wang, column 9, lines 17-19. However, it should be understood that the user's registration information is related to a *human user* instead of being related to the "registration information of *an optical network unit (ONU)*" (emphasis added). See e.g., Wang, column 8, lines 20-25. The Examiner has attempted to equate the ONU that is a network device with a human user, but this assertion is clearly untenable. Further, claim 9 is patentable over the cited art because of its dependency on claim 1. Accordingly, reconsideration and withdrawal of the rejection of claims 1 and 9 are respectfully requested.

With respect to the § 103(a) rejection of claim 16, this claim recites analogous elements to those in claim 1. Therefore, for at least the reasons mentioned in connection with claim 1, the cited art fails to teach or suggest each element of claim 16. Accordingly, reconsideration and withdrawal of the rejection of claim 16 are respectfully requested.

Claims 12 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of Ramamurthy and U.S. Patent Publication No. 2004/0202121 issued to Yuang et al. (hereinafter "Yuang").

Claim 12, as amended, recites the elements of "a scheduler, which *determines priorities of the transmission permission messages from queues based on registration information of each optical network unit (ONU) that receives the transmission permission messages*, determines a transmission start time of upstream data *based on a priority*, and outputs the transmission permission messages" (emphasis added). These elements are analogous to the elements recited in claim 1 as discussed above. Thus, for at least the reasons discussed above in connection with claim 1, AAPA in view of Ramamurthy fails to teach or suggest each element of claim 12. In addition, Yuang fails to teach or suggest the missing elements. Instead, Yuang relates to a bandwidth allocator for static and dynamic bandwidth allocation, but fails to teach prioritization of messages in the manner recited in the claim. As a result, AAPA in view of Ramamurthy and Yuang fails to teach or suggest each element of claim 12. Further, claim 14 is patentable over the cited art because of its dependency on claim 12. Accordingly, reconsideration and withdrawal of the rejection of claims 12 and 14 are respectfully requested.

Claims 9 and 14 are rejected under *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (2007) (hereinafter “KSR”).

Lastly, with respect to the rejection of claims 9 and 14 under KSR, the Examiner has failed to establish a *prima facie* case of obviousness. As required in the MPEP, to determine obviousness of a claim: (1) factual findings must be made under the factors set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966); and (2) the analysis supporting the rejection under 35 U.S.C. § 103 should be made explicit and there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. See MPEP §§ 2141(II), 2141(III), and 2142; KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385, 1396; see e.g., MPEP § 2143 (providing a number of rationales which are consistent with the proper “functional approach” to the determination of obviousness as laid down in *Graham*). Instead, without providing a rationale or pointing to evidence in the record, the Examiner stated that claims 9 and 14 are rejected solely because the claims recite what is already well known in the art. Therefore, the Examiner has failed to meet the requirements for determining the obviousness of claims 9 and 14. In addition, because claims 9 and 14 depend on base claims 1 and 12, the cited art fails to teach or suggest each element of claims 9 and 14 for the reasons mentioned in connection with claims 1 and 12. Accordingly, reconsideration and withdrawal of the rejection of claims 9 and 14 are respectfully requested.

III. Allowable Subject Matter

The Applicants note with appreciation that claims 2-6, 13, and 15 have been allowed. The Applicants respectfully acknowledge with appreciation the Examiner’s indication that claims 2-6, 13, and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 2-6, 13, and 15 depend from base claim 1 or 12 and incorporate the limitations thereof. As previously discussed, claims 1 and 12 are patentable over the cited art. Thus, for at least the reasons that claims 2-6, 13, and 15 depend from an allowable base claim, the Applicants believe claims 2-6, 13, and 15 are patentable over the cited art without rewriting the claims in the manner proposed by the Examiner. Accordingly, the Applicants respectfully request consideration and allowance of claims 2-6, 13, and 15 at the Examiner’s earliest convenience.

CONCLUSION

In view of the foregoing, it is believed that all claims now pending patentably define the subject invention over the prior art of record, and are in condition for allowance and such action is earnestly solicited at the earliest possible date. If the Examiner believes that a telephone conference would be useful in moving the application forward to allowance, the Examiner is encouraged to contact the undersigned at (310) 207 3800.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

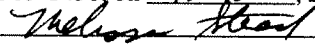
Dated: 12/13, 2007


Eric S. Hyman, Reg. No. 30,139

1279 Oakmead Parkway
Sunnyvale, CA 94085-4040
(310) 207-3800

CERTIFICATE OF ELECTRONIC FILING

I hereby certify that this paper is being transmitted online via EFS Web to the Patent and Trademark Office, Commissioner for Patents, Post Office Box 1450, Alexandria, Virginia 22313-1450, on 12-13, 2007.


Melissa Stead 12-13, 2007